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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/828,021	04/06/2001	John F. Astorino	60426-236; 2000P07567US01	6386
24500	7590	11/03/2005	EXAMINER	
SIEMENS CORPORATION INTELLECTUAL PROPERTY LAW DEPARTMENT 170 WOOD AVENUE SOUTH ISELIN, NJ 08830			GRIER, LAURA A	
			ART UNIT	PAPER NUMBER
			2644	

DATE MAILED: 11/03/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/828,021

Applicant(s)

ASTORINO ET AL.

Examiner

Laura A. Grier

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 21 July 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-7 and 9-20 is/are pending in the application.
- 4a) Of the above claim(s) 5-7, 9-11 and 17-20 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-4 and 12-16 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
- Paper No(s)/Mail Date 8/16/05

- 4) ☐ Interview Summary (PTO-413)
- Paper No(s)/Mail Date. _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

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DETAILED ACTION

Election/Restrictions

1. Applicant's election without traverse of Species II, which includes **claims 2-4** (previously indicated claims 2-5, was a typographical error) **and claims 13-16** in the reply filed on 7/21/05 is acknowledged.

Double Patenting

2. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. See *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent is shown to be commonly owned with this application. See 37 CFR 1.130(b).

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

3. Claim 1 is provisionally rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1 and 8 of copending Application No. Pub. No. 20010046300 in view of Matsui, U. S. Patent No. 4506380.

Regarding claim 1, Pub. No., 20010046300 (herein, pub-300) discloses in claim 1, generating a noise canceling signal, which reads on generating a noise canceling signal; wherein the noise canceling is based upon an assessed environment assumption and further altering the noise based upon that assessment; claim 8, discloses ceasing the generation of noise canceling

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based upon the system condition, which indicates ceasing the generation of the noise canceling signal. However, pub-300 fails to disclose sensing a throttle position.

Regarding sensing a throttle position, in similar field of endeavor, Matsui discloses noise suppression/cancellation within a vehicle, wherein a sensed position of a throttle is a contributing factor of engine noise (col. 2, lines 2-7) and its control.

It would have been obvious to one of the ordinary skill in the art at the time the invention was made to modify the invention of pub-300 by implementing sensing the position of a throttle for the purpose of effectively the controlling the sound field within a vehicle based upon specific noise factors.

Regarding claim 2, pub-300 and Matsui disclose everything claimed as applied above (see claim 1). Pub-300 and Matsui (Matsui) discloses sensing engine noise and indicates whether the noise exceed a predetermined level (col. 2, lines 65-68 – col. 3, lines 1-21).

Regarding claim 3, pub-300 and Matsui disclose everything claimed as applied above (see claim 1). Pub-300 and Matsui (Matsui) discloses sensing engine noise and other factors that prones noise, which would consititute as background sound (col. 1, lines 55-68 – col. 2, lines 1-20).

Regarding claim 4, pub-300 and Matsui disclose everything claimed as applied above (see claim 1). Pub-300 and Matsui (Matsui) discloses sensing engine noise and other factors that prones noise, which would consititute as background sound (col. 1, lines 55-68 – col. 2, lines 1-20). Thus, providing a ratio of the engine noise and background sound would have been obvious to one of the ordinary skill in the art at the time the invention was made to modify the invention

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of pub-300 and Matusi by providing a ratio for the purpose of providing numerical representation of similarities of engine noise and background sound.

4. Claim 12 is provisionally rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claim 10 of copending Application No. Pub. No. 20010046300 in view of Shibata et al., U. S. Patent No. 5581619.

Regarding claim 12, pub-300 discloses in claim 10, generating a noise canceling signal, which reads on generating a noise canceling signal; wherein the noise canceling is based upon an assessed environment assumption and further altering the noise based upon that assessment; sensing a system condition and ceasing the generation of noise canceling based upon the system condition, which indicates ceasing the generation of the noise canceling signal, therein. However, pub-300 fails to disclose sensing engine noise, which can be among sensed conditions.

Regarding sensing engine noise, in a similar field of endeavor, Shibata discloses a vehicle internal noise reduction system and method. Shibata's disclosure comprises system with canceling sound means for generating a noise canceling signal (figure 1 – 8/9), means for sensing for a system condition (figure 1 – 10), wherein noise canceling is interrupted or discontinued base of the sensed conditions and the system condition relates to an engine noise source (abstract, col. 4, lines 17-20, 35-55, col. 7, lines 11-15, col. 8, lines 23-31), wherein it is obvious that noise monitored to determine if the noise level does or does not exceed a predetermined level as evident by the sensors.

It would have been obvious to one of the ordinary skill in the art at the time the invention was made to modify the invention of pub-300 by implementing sensing engine noise for the purpose of attenuating vehicle internal noise sounds.

Regarding **claim 13**, pub-300 and Shibata discloses everything claimed as applied above (see claim 12). Pub-300 and Shibata (Shibata) indicates the factors of the engine noise (col. 6, lines 22-31). Thus, providing a ratio of the engine noise and background sound would have been obvious to one of the ordinary skill in the art at the time the invention was made to modify the invention of pub-300 and Shibata by providing a ratio for the purpose of providing numerical representation of similarities of engine noise and background sound.

Regarding **claim 14**, pu-330 and Shibata disclose everything claimed as applied above (see claim 12). Pub-300 and Shibata (Shibata) indicates that system senses change of the system condition by continuous monitoring of the acceleration and deceleration of the engine with an engine condition judging means (figure 8), so that system is able to update itself upon interruptions.

Regarding **claim 15**, pub-300 and Shibata disclose everything claimed as applied above (see claim 14). Pub-300 and Shibata (Shibata) indicates that a noise-canceling signal in generated by upon a change in the system via the system ability to reset and updated the filter coefficients (col. 7, lines 11-35).

Regarding **claim 16**, pub-300 and Shibata disclose everything claimed as applied above (see claim 12). Pub-300 and Shibata (Shibata) obviously indicates recording the disablement of the noise-canceling feature as evident by the fact that filters are updated (col. 7, lines 11-65).

This is a provisional obviousness-type double patenting rejection.

Claim Rejections - 35 USC § 102

5. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

6. **Claims 12-16** are rejected under 35 U.S.C. 102(b) as being anticipated by Shibata et al., U. S. Patent No. 5581619.

Regarding **claim 12**, Shibata discloses a vehicle internal noise reduction system and method. Shibata's disclosure comprises system with canceling sound means for generating a noise canceling signal (figure 1 – 8/9), means for sensing for a system condition (figure 1 – 10), wherein noise canceling is interrupted or discontinued base of the sensed conditions and the system condition relates to an engine (abstract, col. 4, lines 17-20, 35-55, col. 7, lines 11-15, col. 8, lines 23-31) and Shibata inherent indicates the system condition relates to background noise; and the relation between the background noise and engine noise as evident by the fact that the microphone is positioned in the passenger compartment of the vehicle (figure 1, and col. 4, lines 44-48), where in the microphone pickup is susceptible components location of the microphone, and further any noise or factors that generate noise constitutes as background noise, such as the speed/acceleration, etc. Further, it is inherent that noise is monitored to determine if the noise level does or does not exceed a predetermined level as evident by the sensors.

Regarding **claim 14**, Shibata discloses everything claimed as applied above (see claim 12). Shibata indicates that system senses change of the system condition (noise) by continuous

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monitoring of the acceleration and deceleration of the engine with an engine condition judging means (figure 8), so that system is able to update itself upon interruptions.

Regarding **claim 15**, Shibata discloses everything claimed as applied above (see claim 14). Shibata indicates that a noise-canceling signal is generated by upon a change in the system via the system ability to reset and update the filter coefficients (col. 7, lines 11-35), in respect to the detected noise.

Regarding **claim 16**, Shibata discloses everything claimed as applied above (see claim 12). Shibata inherently indicates recording the disablement of the noise-canceling feature as evident by the fact that filters are updated (col. 7, lines 11-65), in respect to the detected noise.

Claim Rejections - 35 USC § 103

7. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

8. Claims 1-4 are rejected under 35 U.S.C. 103(a) as being unpatentable over Shibata in view of Matsui.

Regarding **claim 1**, Shibata et al. (herein, Shibata) discloses a vehicle internal noise reduction system and method. Shibata's disclosure comprises system with canceling sound means for generating a noise canceling signal (figure 1 – 8/9), means for sensing for a system condition (figure 1 – 10), wherein noise canceling is interrupted or discontinued base of the

sensed conditions (abstract, col. 4, lines 35-55, col. 7, lines 11-15, col. 8, lines 23-31). However, Shibata fails to disclose sensing a throttle position.

Regarding sensing a throttle position, in similar field of endeavor, Matsui discloses noise suppression/cancellation within a vehicle, wherein a sensed position of a throttle is a contributing factor of engine noise (col. 2, lines 2-7) and its control.

It would have been obvious to one of the ordinary skill in the art at the time the invention was made to modify the invention of pub-300 by implementing sensing the position of a throttle for the purpose of effectively the controlling the sound field within a vehicle based upon specific noise factors.

Regarding **claim 2**, Shibata discloses everything claimed as applied above (see claim 1). Shibata discloses an engine (figure 1 – col. 4, lines 17-20), which relates to engine noise, wherein it obvious that noise monitored to determine if the noise level does or does not exceed a predetermined level as evident by the sensors.

Regarding claims 3 and 4, Shibata and Matsui (Shibata) indicates the factors of the engine noise (figure 1, and col. 4, lines 44-48, and col. 6, lines 22-31). Thus, providing a ratio of the engine noise and background sound would have been obvious to one of the ordinary skill in the art at the time the invention was made to modify the invention of Shibata by providing a ratio for the purpose of providing numerical representation of similarities of engine noise and background sound.

Claims 13 are rejected under 35 U.S.C. 103(a) as being unpatentable over Shibata

Regarding **claim 13**, Shibata discloses everything claimed as applied above (see claim 12) (Shibata) indicates the factors of the engine noise (figure 1, and col. 4, lines 44-48, and col. 6,

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lines 22-31). Thus, providing a ratio of the engine noise and background sound would have been obvious to one of the ordinary skill in the art at the time the invention was made to modify the invention of Shibata by providing a ratio for the purpose of providing numerical representation of similarities of engine noise and background sound.

Response to Arguments

Applicant's arguments with respect to claims 1-20 (currently pending claims 1-4, and 12-16) have been considered but are moot in view of the new ground(s) of rejection.

The applicant essentially argues that prior art of record fails to disclose the claimed invention in respect the amended claim language. A double patent rejection has been provided. For claims 1-4, a new art rejection has been set forth, Shibata has been modified to provide support of sensing a throttle position in respect to controlling noise cancellation, and teachings of Shibata is still being used in respect to claims 12-16. The argument of the limitation of determining level of noise being sensed to either provide a noise canceling signal or not is inherent the noise sensing process taught by Shibata.

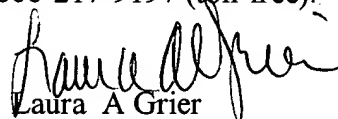
Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Laura A. Grier whose telephone number is (571) 272-7518. The examiner can normally be reached on Monday - Friday, 7:30 am - 4:00 pm.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Vivian Chin can be reached on (571) 272-7848. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Laura A Grier
Primary Examiner
Art Unit 2644
October 30, 2005